

Domestic Proton Single Event Effects (SEE) Test Facility Status >200 MeV– June 2018

Kenneth A. LaBel

ken.label@nasa.gov

**Program Manager, NASA/OSMA,
NASA Electronic Parts and Packaging (NEPP) Program**

**Ad hoc proton “team” formed by NASA OSMA/NEPP along with Air Force Space
and Missiles Center (AFSMC), NRO, and Department of Energy (DOE) with
support from industry and university partners**



Guide for Status

Key code

Yes

Selling time regularly

Limited

Some time available

Future interest

Have expressed interest - reasonable probability of access within the next year or sooner

Not at this time

Had expressed some interest, but currently not selling access

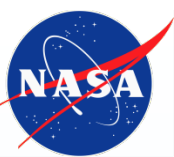
Unknown

No response recently



Positives

<u>Selling time</u>	<u>Organization</u>	<u>Location</u>	<u>POC(s)</u>	<u>Email(s)</u>	<u>Notes</u>
Yes	James M. Slater MD Proton Treatment & Research Center Northwestern	Loma Linda, CA	Andrew Wroe	awroe@llu.edu	BUSY! Booked well in advance at this time.
Yes	Medicine Chicago Proton Center	Warrenville, IL	Steven Laub	steven.laub@nm.org	BUSY
Yes	The MGH Francis H. Burr Proton Beam Therapy Center Tri-University	Boston, MA	Ethan Cascio	ecascio@partners.org	BUSY! Booked through 2018. 3 out of 4 weekends a month access.
Yes	Meson Facility (TRIUMF) Proton Irradiation Facility	Vancouver, CAN	Ewart Blackmore, Mike Trinczek	ewb@triumf.ca , trinczek@triumf.ca	Several cycles of access a year with two beam lines
Yes	Provision CARES Proton Therapy Center	Knoxville, TN	Ben Robison	ben.robison@provisionproton.com	Taking customers starting in August '18. Weekdays 8AM-8PM on dedicated machine.



Hopeful

<u>Selling time</u>	<u>Organization</u>	<u>Location</u>	<u>POC(s)</u>	<u>Email(s)</u>	<u>Notes</u>
Limited	Hampton University Proton Therapy Institute (HUPTI)	Hampton, VA	Vahgan Nazaryan	vahagn.nazaryan@hamptonu.edu	Limited shared hours with maintenance in evenings during the week. Hoping to get a dedicated research room funded by CY19.
Limited	Mayo Clinic Proton Beam facility - Rochester	Rochester, MN	Nicholas Remmes	Remmes.Nicholas@mayo.edu	15-30 hours a month over 2 weekends
Limited	MD Anderson Proton Therapy Center	Houston, TX	TBD		Limited access (NASA/JSC) with possible future access to others. Dedicated research room with tentative plans for access during days (interleave) and in evenings. No weekends. Expect later summer access possibility.
Future interest	Proton Therapy at University of Cincinnati Medical Center	Liberty Township, OH	Abram Gordon, Anthony Mascia	Abram.Gordon@cchmc.org , Anthony.Mascia@cchmc.org	Awaiting further contact, but rumors of others in discussion.
Future interest	Mayo Clinic Proton Beam Facility - Phoenix	Phoenix, AZ	Vickie Miller	Miller.Vickie1@mayo.edu	



Not Right Now or ?

<u>Selling time</u>	<u>Organization</u>	<u>Location</u>	<u>POC(s)</u>	<u>Email(s)</u>	<u>Notes</u>
Not at this time	Maryland Proton Therapy Center	Baltimore, MD	Katja Langen	klangen@umm.edu	Waiting on patient volume for planned shared clinical/research room. TBD.
Not at this time	Miami Cancer Institute Proton Therapy Center	Miami, FL	Alonso Gutierrez	AlonsoG@baptisthealth.net	Still commissioning, but have expressed interest.
Not at this time	ProCure Proton Therapy Center in Oklahoma City	Oklahoma City, OK	Andrew Kniseley	andrew@PriorityHealthMgmt.com	
Not at this time	Seattle Cancer Care Alliance (SCCA) Proton Therapy Center	Seattle, WA	Unknown		
Not at this time	University of Florida Health Proton Therapy Institute	Jacksonville, FL	Stuart Klein	sklein@floridaproton.org	Putting in a 2nd source, but not taking customers at this time
Unknown	California Protons Cancer Therapy Center	San Diego, CA	Andrew Chang	andrewlchangmd@gmail.com	Formerly SCRIPPS - real-time update expected
Unknown	Roberts Proton Therapy Center	Philadelphia, PA	Lei Dong	Lei.Dong@uphs.upenn.edu	Expanding with remote sites as well.
Unknown	Texas Center for Proton Therapy	Irving, TX	Unknown		



Other

- **There's been several discussions regarding “dedicated” proton >200 MeV SEE Test Facility**
 - **Los Alamos Neutron Science Center (LANSCE)**
 - **800 MeV source potential!**
 - **Room-size source are now in the \$3-5 M range**
 - **Worth considering both as a government/national asset or as a private investment?**